

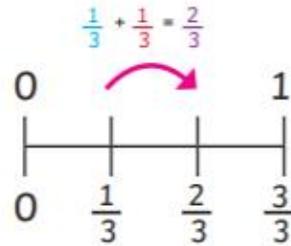
# Fractions

## Fractions

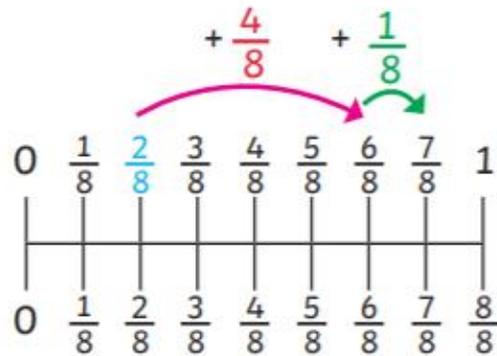
### Adding Fractions

Fractions can be added when the denominators are the same.

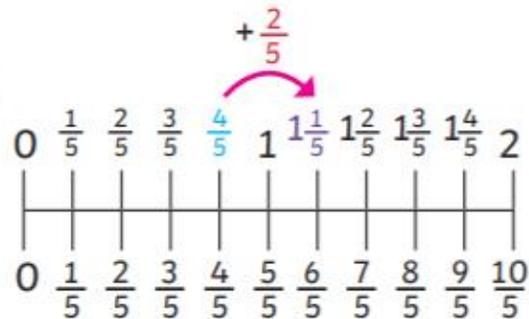
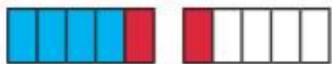
$$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$$



$$\frac{2}{8} + \frac{4}{8} + \frac{1}{8} = \frac{7}{8}$$



$$\frac{4}{5} + \frac{2}{5} = \frac{6}{5} \text{ or } 1\frac{1}{5}$$

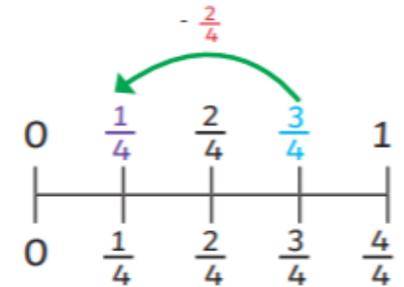


## Knowledge Organiser

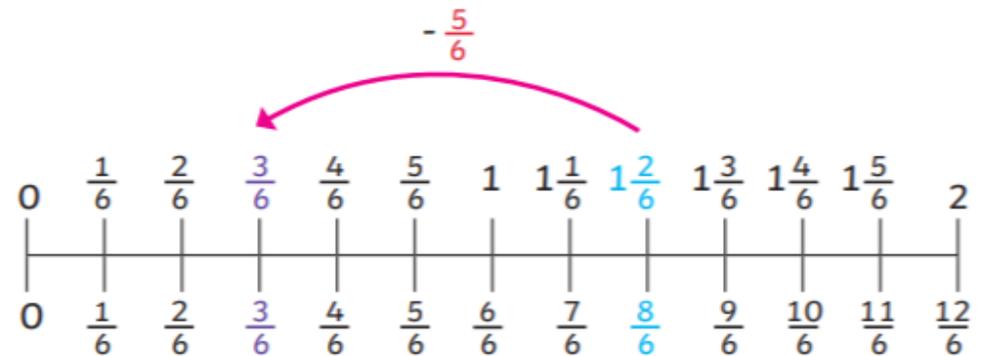
### Subtracting fractions

Fractions can be subtracted when the denominators are the same.

$$\frac{3}{4} - \frac{2}{4} = \frac{1}{4}$$



$$\frac{8}{6} - \frac{5}{6} = \frac{3}{6}$$



# Fractions

## National Curriculum Aims

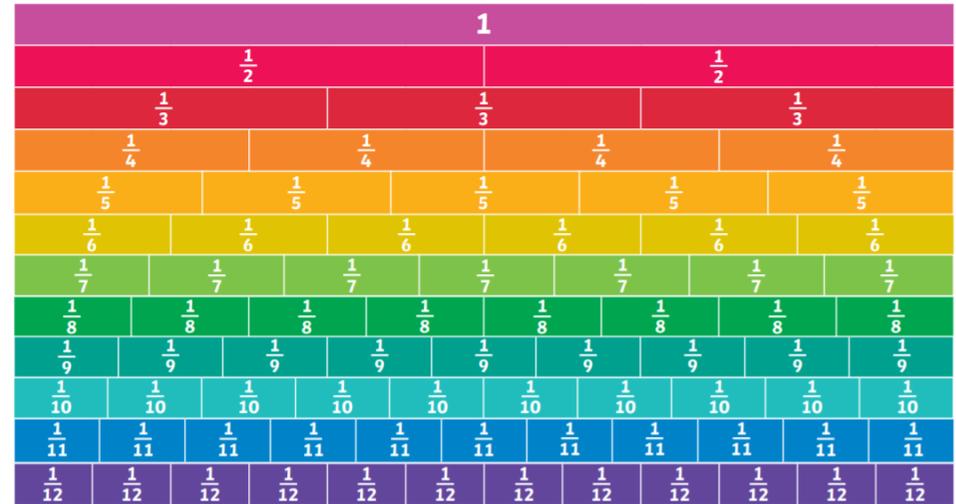
- Pupils should connect hundredths to tenths and PV and decimal measure.
- Pupils should understand the relation between non-unit fractions and multiplication and division quantities.
- Pupils should practice adding and subtracting fractions with same denominators.

## Key Vocabulary

Fraction	a numerical quantity that is not a whole number (e.g. $\frac{1}{2}$ , 0.5).
Proper/improper	A proper fraction is a <b>fraction whose numerator is smaller than its denominator</b> . An improper fraction is a fraction whose numerator is equal to or greater than its denominator.
Equivalent	Equivalent fractions are <b>two or more fractions that are all equal</b> .
Percent (%)	an amount out of 100.
Decimal	A decimal is a way of writing a number that is not whole. Decimal numbers are <b>'in between' numbers</b> .
Hundredths	One part in a hundred equal parts. $\frac{1}{100}$ th
Unit and Non Unit	A unit fraction is any fraction where the numerator is 1, eg $\frac{1}{4}$ . A non-unit fraction is a fraction where the numerator is not 1, eg $\frac{3}{4}$ .

## Core Knowledge and Representations

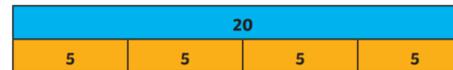
### Fraction Families



### Fractions of Quantities

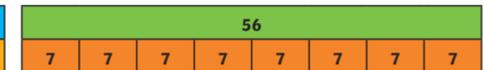
To find a fraction of a number, divide by the denominator and multiply by numerator.

To find quarters of 20:



$$\frac{1}{4} \text{ of } 20 = 5 \quad \frac{2}{4} \text{ of } 20 = 10 \quad \frac{3}{4} \text{ of } 20 = 15 \quad \frac{4}{4} \text{ of } 20 = 20$$

To find eighths of 56:



$$\frac{1}{8} \text{ of } 56 = 7 \quad \frac{2}{8} \text{ of } 56 = 14 \quad \frac{3}{8} \text{ of } 56 = 21 \quad \frac{4}{8} \text{ of } 56 = 28$$

$$\frac{5}{8} \text{ of } 56 = 35 \quad \frac{6}{8} \text{ of } 56 = 42 \quad \frac{7}{8} \text{ of } 56 = 49 \quad \frac{8}{8} \text{ of } 56 = 56$$

## Home Learning



Build a fraction wall-You can use sticks, swim noodles or even strips of paper to compare fractions. Have a go at different ways to make one whole, one half and so on.